DIPTERA FROM NEPAL

CONOPIDAE FROM NEPAL AND THE ORIENTAL REGION

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SYNOPSIS

Seventeen specimens from Nepal were received, representing six species, only one of which was previously known from Nepal. Two of the six species are new. Five additional Oriental records are presented, including a new species of *Microbrachyceraea*. A key is given for the genera related to *Microbrachyceraea*.

THIS report is based on specimens collected by the British Museum East Nepal Expedition of 1961–62. In addition other specimens in the British Museum (Natural History) and the Bishop Museum are recorded. These were received through the courtesy of R. L. Coe and J. L. Gressitt.

A. RECORDS FROM NEPAL

Conops claripennis Brunetti

Brunetti, 1923 : 345

E. NEPAL : Arun Valley ; Tumlingtar plateau, *c.* 2,000 ft, yellow blooms of cultivated composite (*Guizotia abyssinica* Cassini), 5 ♂, 1 ♀, 8–25.xii.1961 (*R. L. Coe*), B.M. (Nat. Hist.).

UNITED PROVINCES : Kotdwara, 1 ♀, 10.vi.24 (*T. Jermyn*), B.M. (Nat. Hist.).

These specimens are relatively large (9·5–10·5 mm.) and dark, and have a small area of blackish in the centre of the front. Otherwise known only from the type series from Quetta and Deesa.

Physocephala sinensis Kröber

Kröber, 1934 : 15.

E. NEPAL : Taplejung Distr. ; Sangu, *c.* 6,200 ft, yellow blooms of cultivated composite (*Guizotia abyssinica* Cassini), 1 ♂, 2 ♀, 16–29.x.1961, mixed vegetation by stream in gully, 1 ♀, xi.1961–i.1962. Arun Valley ; Tumlingtar plateau, yellow blooms of cultivated composite (*Guizotia abyssinica* Cassini), 1 ♂, 1 ♀, 10–16.xii.1961 (*R. L. Coe*), B.M. (Nat. Hist.).

These specimens average too large and too dark to be referred to *calopa*, *tenella*, or *limbipennis*. In a previous paper (Camras, 1960 : 124) the frequent absence of the black on the apex of the wing was noted. At that time I was not aware that the main difference from *pusilla* is the absence of the wing pattern in the basal cells in *sinensis*.

This widely distributed species is here recorded for the first time outside of China.

Bull. Brit. Mus. (nat. Hist.), Ent. **17** (10) 1966.

Physocephala coei sp. n.

♂. Length 7 mm. Front black. Vertex dark yellow, black anteriorly. Facial grooves and cheeks yellow. Black mark in middle of facial keel and grooves. Occiput black, posterior orbit white pollinose. Antenna mainly black, apex of second segment and most of third segment rufous. First segment three times as long as wide. Second segment three times length of first. Third segment half as long as second. Arista and process of its proximal segment relatively short. Proboscis entirely black, twice length of head.

Thorax entirely black, slight brownish tinge on humerus. Yellow pollinose on upper metathorax and upper margin of postnotum. Faintly white pollinose medial to the humerus and forming an indistinct pleural stripe. Coxae mainly black, partly white pollinose. Legs rufous, partly black on anterior femora. Posterior femur mainly black. Posterior tibia yellow on basal 3/5, black apically. Tarsi yellowish on proximal segments, black on apical segments. Claws black, pulvilli yellow. Wings greyish hyaline, brownish black pattern from costa to third vein, ending abruptly apically a little beyond the second vein. First posterior cell with pattern in most of basal half. Margin posterior to the vena spuria partly hyaline. Calypters white. Halteres yellow, dark brown at base of stem.

Abdomen black. Rufous narrowly at junction of first and second segments, and second and third segments. Yellow pollinose posterior margin on third, fourth, and fifth segments, narrower on dorsum. Sixth segment mainly yellow pollinose, rufous apically. Genitalia mainly black.

♀. Length 7 mm. Similar to the male. Front reddish black to dark rufous and less distinctly separated from the face. Spot on keel and facial grooves brownish and much smaller. Black on legs more extensive, so that posterior femur and posterior tarsus are almost entirely black.

Abdomen darker without rufous at junction of first and second segments. No pollinose margin on fifth segment. Apical segments white pollinose. Theca and genitalia entirely black. Theca relatively short and thick, as long as wide.

Holotype ♂. E. NEPAL : Arun Valley ; Tumlingtar plateau, *c.* 2,000 ft, yellow blooms of cultivated composite (*Guizotia abyssinica* Cassini), 10–16.xii.1961 (*R. L. Coe*), B.M. (Nat. Hist.). Allotype ♀. Same data except 8–25.xii.1961.

This species differs from all the related species except *annulifera* by having the humerus brownish black. From *annulifera* it differs by having the antenna and abdomen mainly black and lacking the black triangular mark on a reddish yellow front.

Physocephala rufifrons Camras

Camras, 1960 : 121.

NEPAL : Jiri, 2,000 m., 1 ♂, 17.v.1962 (*G. Ebert* and *H. Falkner*), B.M. (Nat. Hist.)

This specimen agrees fairly well with the description of the unique type female from Szechwan, but has the face as well as the front dark rufous, leaving only the facial grooves yellow.

Physocephala bicolorata Brunetti

Brunetti, 1925 : 79.

NEPAL : Jiri, 2,000 m., 1 ♂, 15.v.1962 (*G. Ebert* and *H. Falkner*), B.M. (Nat. Hist.).

Thecophora nepalensis sp. n.

♀. Length 4 mm. Black, and white pollinose. Yellow on face, cheeks, basal half of femora, narrow junction of femora and tibiae, and pulvilli. Front rufous on apical margin, and adjacent to the ocelli. Antenna partly rufous at junction of second and third segments. First segment

slightly longer than wide. Third segment a little longer than second segment. Apical half of distal segment of proboscis dark yellow. Lower half of occiput blackish yellow.

Wings greyish hyaline. Veins dark brown to black. Practically no yellow at the base of wing. Calypters and halteres yellowish white. Abdomen with indistinct distal white pollinose margins on sides of second and third segments, becoming extremely narrow on sides of fourth segment. Theca relatively long and spoon-shaped. Basal 2/3 distinctly yellow. Apical third and sides with distinct black margin corresponding to the black serrated area on the posterior surface.

Holotype ♀. E. NEPAL: Taplejung Distr., above Sangu, *c.* 9,200 ft, damp evergreen oak forest, 2–26.xi.1961 (*R. L. Coe*), B.M. (Nat. Hist.).

This species is similar to *atra*, but differs by the distinctive theca which is larger and yellow on the basal two-thirds, sharply separated from the black margin. The almost complete absence of yellow at the base of the wing is apparently also an important specific character.

B. OTHER ORIENTAL RECORDS

Microbrachyceraea intermedia sp. n.

♀. Length 8 mm. Mainly black. Yellow on front, face, cheeks, basal half of antenna, basal half of tibiae, calypters, halteres, and narrow apical margin of second abdominal segment. Ocellar tubercle and mark above base of antennae shining black. Facial grooves, cheeks, and orbits white pollinose. Antenna partly rufous on second segment, black on apex and arista. Second antennal segment a little shorter than third. Third segment nearly as wide as long. Arista three-segmented, no process on the second segment. Proboscis as long as head.

Femora dark rufous at apex and base and on trochanters. Second abdominal segment rufous, darker dorsally at base. Wings brownish hyaline, with brown pattern between first and third veins, becoming paler in the posterior half of the submarginal cell.

Abdomen with white pollinose areas on sides of apex of second and third segments. Narrow dark yellow apical margins on fifth segment and dorsum of sixth segment. Apex of abdomen and theca brownish black. Theca triangular with thick bulging posterior serrated area.

Holotype ♀. N. W. THAILAND: Chiangmai, Fang, 500 m., 12–19.iv.1958 (*T. C. Maa*), Bishop Mus.

M. pendleburyi differs from this species in addition to being smaller (5 mm.), by having some black on the front, brownish black second abdominal segment, and no brown pattern in the wing.

This species is somewhat intermediate between *Microbrachyceraea pendleburyi* and *Neobrachyceraea obscuripennis*, but the genera may be separated as follows:

1 Ocelli present. Front above, twice width of eye . . . ***BRACHYCERAEA***

– Ocelli absent. Front much less than twice width of eye 2

2 Second segment of arista with distinct lateral process (projection). Second antennal segment longer than third. Ocellar tubercle more or less depressed. Large species (10–18 mm.) . . . . . ***NEOBRACHYCERAEA***

– Second segment of arista without process. Second antennal segment slightly shorter than third, which is relatively wide. Ocellar tubercle not depressed. Small species (5–8 mm.) . . . . . ***MICROBRACHYCERAEA***

Conops vesicularis Linné

Conops ornatus Big. ; Brunetti, 1927 : 306.

MALAYA : Selangor, Kuala Lumpur, 1 ♀, ex coll. Dept. Agric., B.M. (Nat. Hist.).

This represents a marked extension of range, as this common European species is otherwise known in Asia only from Siberia and Korea. I hope it is not an erroneously labelled specimen.

Physoconops microvalvus Kröber

Kröber, 1930 : 71.

MALAYA : Matang, 1 ♂, June, 1900, B.M. (Nat. Hist.).

Previously known only from Java ; but *Conops celebensis* may be the same.

At one time (Camras, 1960 : 117) I referred this species to the genus *Siniconops*, but I am not sure that this is correct, and am leaving it here for the present.

Physocephala fumosa Camras

Camras, 1957b : 115.

JAVA : Buitenzorg, 1 ex. (abd. missing) (*F. Muir*), Bishop Mus.

S. MOLUCCAS : Amboina, 4 ♂, 4 ♀, ii.01 (*F. Muir*), Bishop Mus.

Previously known only from the type male from Ambon [=Amboina].

All of these specimens have the scutellum rufous or brown, and the postnotum is partly brown in some specimens. The female theca is somewhat prominent and is similar to that of *bipartita*.

Zodiomyia sumbaensis Camras

Camras, 1957*a* : 163.

N.E. INDIA : Narendranagar, 3,000 ft, 1 ♀, 7.xi.1944 (*T. Jermyn*), B.M. (Nat. Hist.).

This is a remarkable extension of range. The species (and genus) was previously known only from the unique female type from Sumba Island, Lesser Sunda Islands.

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